Clinical Section

*Some Back Injuries and Causes of Low Back Pain with Demonstration of Methods of Treatment

By

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In presenting this subject this morning I am making no attempt to give you any review of the literature, for two reasons: first, because there is not enough time, and second, because there is too much difference of opinion. The pathology of backache is largely a matter of conjecture, our observations being almost entirely clinical. People do not die of backache, and opportunity for post mortem examination rarely presents itself. However, since I have become interested in this subject it has seemed to me that there has been a great tendency to group all backaches under the classification of lumbago, and the usual treatment for the condition has been baking and massage, with or without rest. This short presentation will be an attempt to divide the subject into one or two more definite groups, and to outline supplementary forms of more active treatment which I have found to be of value.

CRUSH FRACTURE

The only injuries of the back about which I wish to speak are crush fractures of the vertebral bodies and acute strains of the lower back. Due to modern methods of transportation, crushing fractures of the bodies of the vertebrae are becoming very common. They are produced chiefly by forced flexion of the spine, as when an automobile turns over and the passengers are tossed about inside the car. Another way that they may occur is in individuals falling from a height, either on their feet or in a sitting position. Ths fact is so well known that it is probably unnecessary to emphasize the importance of a good lateral x-ray in every case of severe back injury. The injury to the body may be severe enough to crush the bone into the shape of a wedge or it may produce very slight deformity. But if any crushing of the vertebral body has occurred it is important to make an early diagnosis and reduction. For the first week or ten days it is comparatively easy to reduce the deformity, but after that time it is difficult, and after two or three weeks quite impossible. Such deformity left unreduced will nearly always lead to a chronic backache which will be very hard to treat and may necessitate spine fusion.

About five years ago Watson Jones introduced a method of reducing such fractures. He places the patient face down between two tables, the patient supporting himself by his thighs and elbows. The body is allowed to sag between the tables and in this position a cast is applied. Reduction is obtained by this method, and for young slim individuals it has been perfectly satisfactory in my hands. Watson Jones claims that it is more satisfactory than other methods because when the body sags in this manner the spine attains the full limit of hyperextension, which limit cannot be determined if the patient is placed on his back on curved bars. The objection that I have to this method is that in middle aged or elderly individuals the abdominal walls become lax and when the patient is sagging between the tables the abdomen hangs down. No matter how tightly you may apply the cast, when it is finished and the patient placed on his back in bed there is a great deal of room to spare in the front of the cast.

To get away from this difficulty we have been using the adjustable Goldthwaite frame in most of our fractures of the spine, and so far it has proven very satisfactory.

In applying a cast either on this frame or by the Jones method there are three points to be remembered: 1. The cast must come high enough to make a backward pressure on the manubrium of the sternum; 2. It must go low enough to exert pressure on the pubes; 3. And the greatest point of curve posteriorly must be opposite the fractured body. After the cast is applied the patient is put to bed until the plaster is thoroughly dry. As soon as pain has subsided he may be allowed to move around in bed and by the end of a week or ten days may be allowed to be up and walking around, wearing the cast. In this matter we have followed more closely the teachings of Boehler, who insists on his fractured spines not only walking but actually carrying weights, than the teachings of the more conservative men who leave their cases in bed for several weeks. So far we have had no trouble and see no reason as yet to change our ideas.

ACUTE STRAIN OF LOWER BACK

The other back injury about which I would like to speak is acute strain of the lower back. The history of such a case is familiar to all of you. A person may be bending to lift a weight or stepping out of a car or may catch his toe against some object in walking, and is suddenly seized with a severe pain in the lower back just over the sacro-iliac joint. He may or may not fall, but if he does he has trouble in getting on his feet again. There may or may not be radiation of pain to the buttock or down the back of the thigh. Walking is difficult and the patient stands with a list, usually away from the injured side. There is marked tenderness on pressure over the joint. The condition is due to acute sacro-iliac strain, but exactly what the pathology of this strain may be is a matter of some debate. X-rays rarely give any significant

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information even as regards arthritic change. There is a small amount of movement at the sacro-iliac joint, which has more the nature of rotation than gliding motion. I believe that the joint is, by sudden strain or by comparatively slight trauma when the muscles are off guard, forced beyond its normal range of movement and becomes, as we might say, locked in that position. This is to some degree substantiated by the fact that such a joint may be manipulated under anaesthetic and almost immediate relief obtained. In the past two and a half years I have manipulated a number of such joints where the symptoms had been present from just a few hours to three or four weeks. Like almost every other man who has attempted manipulation of this type of injury I was astonished at the relief such patients obtained.

The first patient was a woman about 45 years old who, while leaning over to make a bed was suddenly seized with severe pain in the right sacro-iliac area which she said felt as though a knife had been driven into her back. She fell forward on the bed and had difficulty getting into it. This had happened three weeks previous to the time I saw her and during that time she had severe pain in the right sacro-iliac region with some radiation into the sciatic area. Treatment had been rest, heat and massage daily. She was markedly tender over the right sacro-iliac joint and straight leg raising on that side increased her pain. Under gas anaesthetic the joint was manipulated and five minutes later she was awake with the pain gone. She wore a sacro-iliac belt for about six months afterward but was able to be up and around without any symptoms, and so far there has been no recurrence.

Another patient, a man of about 39, locked the bumper of his car with the car ahead. He attempted to free it by standing on one bumper and lifting on the other, and as soon as he did so felt a sudden very severe pain in the lower back. He had some difficulty in getting across the road to his apartment where I saw him about an hour later. The first attempt at manipulation failed because we were using ethyl chloride anaesthesia and were not getting complete muscle relaxation. We attempted it again using aether anaesthetic, with complete success.

Another patient, a woman of about 32 or 33, the wife of a local doctor. She has had at fairly frequent intervals a sudden sharp pain in the lower back which usually came on while lifting. She had usually been laid up for several days after such an accident and obtained gradual relief by heat and rest and massage. On manipulating her back under an anaesthetic the left sacro-iliac joint was heard to give a loud crack which was plainly audible all over the room. She was relieved of her pain when she awakened, and has worn a sacro-iliac belt since, as a precaution against recurrence.

I feel that we should know more about manipulative surgery, not only as applied to the lower back but also as applied to other parts of the body. This is a field of surgery which has fallen into disrepute because of its exploitation by irregulars, and we are apt to forget that many of our great surgeons of the past, particularly in orthopaedic work, knew and used manipulation in the treatment of back pain and joint disabilities. The fact that it has been exploited should not close our eyes to the fact that it has always been a field of surgery, and that it has in some cases a very real usefulness. I think that the medical profession are to some extent to be blamed when an irregular practitioner succeeds in a case where we have failed, simply because we have neglected measures as useful as some of these can be in selected cases. Not all low back pain may be treated by manipulation. In my opinion it should be reserved for the mechanical type of injury which we have discussed.

LUMBO-SACRAL ARTHRITIS

There is another common type of case where the onset of back pain has been gradual. It is felt most acutely in the center of the back over the lumbo-sacral region and usually radiates, as the patient says, across the back. There may be also some radiation to the buttocks or into the sciatic region. There is usually no history of injury but the patient is usually middle-aged or older, very often quite obese. Examination of the back reveals tenderness over the lumbo-sacral region. Putting the sacro-iliac joints on the stretch by straight leg raising or by forced hyperextension of the thigh or by the cross leg test usually does not increase the pain, but strongly flexing both thighs on the abdomen so as to put strain on the lumbo-sacral joint, will cause pain. X-ray pictures, which should include not only antero-posterior and lateral x-rays but also oblique views, show slides, may show arthritic change. A feature of this type of case is often thinning of the disk between the body of the fifth lumbar vertebrae and the sacrum. This allows for telescoping of the lateral facets and is a frequent cause of low back pain. What should be done in such cases? I will not mention the matter of removal of foci of infection, which we always do in such cases except to say that I am uncertain of its value. If the infection is gross, it should be cleaned up. Rest in bed with daily baking and massage is of considerable value. The bed should be a firm one, preferably a hair mattress placed on boards over the spring. The patient should be kept in bed a month or six weeks and on being allowed up should wear a well fitted corset or support in order to splint the lower back. This treatment, however, fails in many cases to give relief and the question arises as to what is to be done. Patients have occasionally received a great deal of benefit from a light course of deep x-ray treatment applied to the lumbo-sacral joint. Just how this x-ray treatment operates is not known, but the fact remains that in a number of cases where all else has failed I have been surprised by the marked relief obtained from a comparatively light dose of deep x-ray. This should be supplemented by wearing of a support. After all conservative measures fail a lumbo-sacral fusion will,

in properly selected cases, give relief. About fourteen months ago I saw a woman of 39 who had been completely crippled with a lumbo-sacral backache for a number of years. It had grown so bad that she had to be lifted out of bed in the morning and set on her feet. After she walked around a little she gradually began to limber up and was able to do a certain amount of work but at all times she had pain. Conservative treatment and deep x-ray therapy failed to relieve this woman, and as a last resort fusion of the fifth lumbar vertebrae to the sacrum was done, the graft being taken from the posterior part of the left iliac crest. She is now completely relieved of her pain and is able to get about and do her housework without any trouble. At the same time I would like to emphasize that lumbo-sacral fusion is not always successful by any means, and is an operation which one performs with a certain amount of misgiving. The Workmen's Compensation Board is not in favor of fusion except in very clearly indicated cases. They have a considerable experience with the results of spine fusion for backache and most of their experience is bad. I feel that manipulation is definitely contradindicated in most lumbo-sacral lesions, particularly if any arthritic change can be detected. The only time that anything comparable to locking of the sacro-iliac joint occurs in this region is when, due to some strong rotation of the trunk upon the flexed pelvis or strong backward flexion of the spine, an acute strain of the lumbo-sacral region occurs. Personally I am not sure whether or not locking does occur though certain authors, particularly Mennell, are very definite on the matter.

Sciatic Pain

Sciatic pain may be a feature of either one of the low back conditions we have discussed, particularly in lumbo-sacral lesions with arthritic change and with thinning of the lumbo-sacral disk. Ghormley and his co-workers have stressed this point on numerous occasions, and the work of Dr. McKinnon is well known to all of you. Whether the sciatic pain is due to actual compression or irritation of the fifth lumbar nerve root as it lies in the foramen, or whether it is due to referred pain from a traumatic arthritis developed in the lateral articulations, as they are telescoped and put upon the strain, I do not know. I feel that it is more likely referred pain from traumatized facets which are true joints and have a rich nerve supply. The sciatic pain will frequently clear up after lumbo-sacral symptoms have been relieved. There is, however, that type of sciatic pain which is apparently primary, which comes on without any low backache preceding it, and where the x-ray does not show evidence of any change in the lumbo-sacral junction. In that type of sciatic pain I have found epidural injection of novacaine very useful. In this procedure one infiltrates the tissues just below the sacral hiatus and passes a long slender needle into the sacral canal. About forty to sixty ccs. of half or one percent novacaine is then slowly injected, watching meanwhile for any evidence of reaction on the part of the patient. As a rule the patient complains of an increase of pain in the painful area, which is temporary and passes off in a few minutes. Complete relief of the sciatic pain follows in many cases. Ghormley reports 75% of cases of primary sciatica improved by this method. In my own experience I would certainly say that at least 60% have been relieved and in some others I was, at the beginning injecting cases which might better have been treated by other means.

Another case of low back pain which has not been much emphasized is that of tender areas in the lumbar muscles. These may or may not follow an injury. The diagnostic point is that the muscles are tender wherever they are put on the stretch and in palpating one can usually find a definite area of tenderness in the muscle, usually close to the attachment. The symptoms that such tender areas may cause may be out of all proportion to the size of the tender spot. Injection with one percent novacaine and infiltrating fairly liberally will give in some cases immediate and lasting relief.

Other Causes

A fairly common cause of backache in stout people is a large and pendulous abdomen. The pain is due in part to a constant pull on the mesentary and to strain on the ligaments of the back. This type of individual is seen fairly often in routine practice and may be completely relieved by a well fitted abdominal support. The type which I have found most satisfactory is a corset stiffened along the back with heavy steels and with a good uplift support to the abdomen.

Sacrilization of the transverse process of the fifth lumbar vertebrae is sometimes considered a cause of backache. The only cases that I have seen where I could convince myself that sacrilization was a factor was those cases where the sacrilized transverse process articulated with the sacrum through a false joint. Occasionally in this type of back, pain develops and is very difficult to treat, except by fusion of the false joint, at the same time doing a lumbo-sacral bone graft.

It is well at all times to keep in mind the possibility of Pott's disease or metastatic malignancy when dealing with severe back pain. Tuberculous conditions of the spine are fortunately becoming fairly uncommon, but we still see them often enough that the condition should be kept in mind. A simple clinical test which is not infallible but useful is to try the effect of heavy percussion on the head or jarring by having the patient stand on his toes and drop heavily on his heels. If this does not increase pain he probably has neither Pott's disease nor metastatic malignancy.

There are many other conditions which cause pain in the back and which we do not have the time to discuss this morning. I have purposely tried to limit this paper to one or two points which may be of some use to you as they have been to me. At the same time I would ask you to remember that the final word has not been said. There is a great deal of difference of opinion regarding treatment of back conditions and as we discover some new treatment or some small variation which is helpful, we discard some part of the treatment we have been using previously. If this paper had been given last year there would have been some slight difference and probably if it were presented next year some things would be changed. It is presented to you in the hope that it may contain some item which may be of help.

Special Articles and Association Notes

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Annual Meeting—Provisional Programme

WEDNESDAY, SEPTEMBER 21st, 1938

Fort Garry Hotel
7.00 p.m. President's Dinner to Executive.
8.00 p.m. Meeting of Executive.

THURSDAY, SEPTEMBER 22nd, 1938

Fort Garry Hotel
8.30– 9.20 a.m. Registration.
Scientific Meeting.
Chairman, C. W. BURNS, F.R.C.S. (C.).

9.30–10.00 a.m. **Cancer of Lip and Mouth.**
A. W. S. HAY, F.R.C.S. (Edin.).

10.00–10.30 a.m. **Cancer of Breast.**
PROF. A. T. BAZIN (McGill).
Discussion: PROF. J. A. GUNN.

10.30–11.00 a.m. **A New Interpretation of Diabetes Mellitus in Obese Middle-Aged Persons. Cure by Reduction of Weight.**
PROF. L. H. NEWBURGH, University of Michigan, Ann Arbor.
Discussion: PROF. C. R. GILMOUR.

11.00–11.30 a.m. **Types of Malignant Disease Treated by Radium from the Cancer Relief Institute of Manitoba.**
PROF. DANIEL NICHOLSON.

11.30–12.00 a.m. **Medical Paper.**
H. D. KITCHEN, M.D. (Man.).

Dining Room
12.30 p.m. Luncheon.
Speakers: PROF. K. A. MACKENZIE, President, and T. C. ROUTLEY, M.D., Secretary of Canadian Medical Association.

Hospitals
2.00– 5.00 p.m. Clinics and Demonstrations.

Fort Garry Hotel
6.00 p.m. Dinner.—Annual Meeting.

Winnipeg Auditorium
8.30 p.m. Public Meeting.
Speakers: PROF. A. T. BAZIN and PROF. L. H. NEWBURGH.

FRIDAY, SEPTEMBER 23rd, 1938

Fort Garry Hotel Scientific Meeting.
Chairman, GEO. CLINGAN, M.D., C.M. (Tor.).

9.00– 9.30 a.m. **Recent Development in the Treatment of Chronic Ear Conditions.**
F. D. McKENTY, F.R.C.S. (C.).

9.30–10.00 a.m. **The Nature and Management of Nephritis Oedema.**
PROF. L. H. NEWBURGH, University of Michigan, Ann Arbor.
Discussion: CHAS. HUNTER, F.R.C.P. (Lond.).

10.00–10.30 a.m. **Paroxysmal Tachycardia.**
PROF. K. A. MacKENZIE, Dalhousie.
Discussion: J. McF. McEACHERN, F.R.C.P. (C.).

10.30–10.40 a.m. **Intermission.**

10.40–11.10 a.m. **Ganglionectomy.**
A. C. ABBOTT, F.R.C.S. (Edin.).

11.10–12.00 a.m. **Insulin Shock Therapy.**
EDWARD JOHNSON, M.D. (Man.).
Discussion: DEAN A. T. MATHERS.

Dining Room
12.30 p.m. Luncheon.

Hospitals
2.00– 5.00 p.m. Clinics and Demonstrations.

Fort Garry Hotel
7.15 p.m. Annual Dinner and Dance.

SATURDAY, SEPTEMBER 24th, 1938

Fort Garry Hotel Scientific Meeting.
Chairman, E. L. ROSS, M.D. (Man.).

9.00– 9.40 a.m. **The Chlorotic Tendency.**
J. D. ADAMSON, M.R.C.P. (Edin.) and W. F. ABBOTT, M.D. (Man.).

9.40–10.10 a.m. **Treatment of Hypertension.**
PROF. K. A. MacKENZIE, Dalhousie.
Discussion: F. G. ALLISON, M.R.C.P. (Lond.).

10.10–10.50 a.m. **Cancer of Colon and Rectum.**
PROF. A. T. BAZIN (McGill).
Discussion: N. J. MacLEAN, F.A.C.S.

10.50–11.00 a.m. **Intermission.**

11.00–11.30 a.m. **Planigraphy.**
DIGBY WHEELER, F.B.A.R.

11.30–12.00 a.m. **Treatment of Fractures Around the Ankle Joint.**
A. GIBSON, F.R.C.S. (Eng.).

Golf Course
2.00– 5.00 p.m. Annual Golf Tournament.

Department of Health and Public Welfare

NEWS ITEMS

The following article is one published by Doctor George W. Henry in a recent edition of "Preventive Medicine," and is one which the Department believe will prove of real interest to the practising profession of Manitoba:

MENTAL HYGIENE DURING PREGNANCY

"In a brief discussion of the mental hygiene of a pregnant woman the temptation to resort to platitudes is great, but instead of yielding to this I will try to express a few thoughts which come to me from clinical experience. Most of this experience is the result of psychiatric consultations in a large general hospital and from intensive study of maladjusted women who have been pregnant. Some of it comes from the observation of the wives of friends and colleagues.

"Pregnancy often is the result of a series of irrational acts in that there is very little preliminary education and practically no supervision of those who are to become parents. Conception is usually accidental and prenatal care is restricted to the physical health of the prospective mother. The physician is primarily interested in the functioning of her pelvic organs in order to obtain a successful delivery. The personal problems of the mother and her physiological and emotional fitness to be a mother seldom receive sufficient attention.

"If the physician were consulted as to the advisability of pregnancy in a particular case, from the viewpoint of mental hygiene, he would probably have to depend upon intuition in arriving at a conclusion. It is only in recent years that his attention has been called to the role played in illness by personality maladjustment and there is still very little knowledge available regarding the mental hygiene aspects of pregnancy.

"In the best of our maternity hospitals the prospective mother is repeatedly examined as to the state of her physical health and accurate measurements are taken to determine her capacity to give birth. Yet in one of these hospitals a woman, already the mother of two children which she cannot support, is required to go on with a pregnancy which was imposed upon her and which she wants terminated. She was referred to this hospital from a psychiatric clinic for the purpose of abortion because she had already had two attacks of mental illness and all of her four siblings either were or had been patients in mental hospitals. The pregnancy was permitted to continue because the patient seemed in good physical health. She was not sufficiently depressed at the time to attract attention.

"This instance of unscientific medical practice (the human and social aspects are too obvious to mention) is cited to call attention to an attitude which is still prevalent. It is taken for granted that a woman will survive pregnancy if she is given proper food, shelter and rest. Her fundamental desires and apprehensions are seldom discovered. The tendencies to personality disorder which she may have pass unnoticed until the stress of pregnancy and childbirth causes them to become manifest.

"Fortunately the majority of women are sufficiently adjustable to deal with the problems of pregnancy without much help but there is no way of being certain that any particular woman will be included in the majority. If the physician feels secure because his patient has remained fairly stable through one or two pregnancies he may not be aware that some of the malignant psychoses follow subsequent pregnancies.[1] If he is unaware that his patient has internal conflicts which lead to manifest disorder he is not sufficiently acquainted with her.

"Under ideal conditions the prospective mother should be emotionally adult and primarily interested in her own health for the sake of the child and her family. Her concern should not go beyond a reasonable adherence to the rules of good hygiene and the directions of her physician. She should have a real desire for the child and she should be able to pass through the period of pregnancy with little discomfort and with a feeling of satisfaction in having achieved a desired goal. She should want the child for its own sake, as a symbol of profound affection between herself and her husband and as another bond by which the family union is maintained.

"How often is this ideal realized? What progress are physicians making in determining the causes of failures? Only a small proportion are due to physical disease. A confidential talk with the prospective mother is likely to disclose that her problems are in large part those which contribute to marital unhappiness and which lead to separation and divorce. They are the result of the incompatible personality traits and tendencies of herself and her husband which in turn reflect their respective family and personal backgrounds.

"If the woman has been primarily interested in herself and marriage has meant little more than the additional attention which she can demand she is not likely to tolerate being displaced by a child. She will avoid pregnancy if possible and if she is not successful she is likely to develop hostile feelings toward the unborn child and toward her husband.

"If a woman has found a father substitute in her husband she may develop a state of neurotic dependency or show some of the profound guilt reactions which are associated with incestuous desires. Mere discrepancy in their ages is only one and an uncertain indication that such a substitute has been found. There are many personality characteristics which the husband many possess in common with the father and which help to perpetuate an old and familiar relationship. In fact, the more we study marital problems the more we find a reproduction of or a reaction to the conditions in the homes of the parents.

"Assuming that the prospective mother retains the affection of her husband she nevertheless has much occasion for apprehension. She is not as physically attractive in her pregnant state and her feelings suggest that she will never again be able to make as much appeal to him. She may be laboring under the impression that physical relations are harmful to herself and to her unborn child and yet she realizes that her husband's desires continue unchanged.

"She may be anxious as to how a larger family is to be maintained on an income which is already inadequate. This anxiety may be tinged with resentment and bitterness over the thought that our present social system penalizes those of her status who reproduce unless they are willing to accept charity.

"With such worries on the part of the pregnant woman we are all familiar, but there are many aspects of pregnancy which are not disclosed to the public and which may escape the attention of the physician. Perhaps one of the most common protests against a state of pregnancy is persistent vomiting. As a rule there is much discussion and investigation on the assumption that the vomiting is physiological or toxic and to determine whether the pregnancy should be allowed to continue.

"Without wishing to minimize the importance of toxic factors in persistent vomiting it is good medical practice to have a psychiatric consultation. In one case of this vomiting a woman thirty years old and three months pregnant was admitted with the expecta-

tion of being aborted. Five previous pregnancies had been terminated by abortion because of persistent vomiting and it was not unnatural that she and her family physician should expect that the same action would be taken again.

"The present situation was complicated by her claim that she wanted this child whereas previously she could not tolerate even the thought of giving birth to one. In her attempt to account for her aversion to being a mother she acknowledged that she had lost all affection for her husband soon after marriage. His sexual demands had been excessive and their relations were distasteful to her. 'I was really very unhappy about it. Having a child and settling down used to frighten me to death. There were terrific scenes—always about sex. Sexual relations were painful and repulsive. I was forced to become pregnant. We are just not suited to each other. It's too bad I'm in this condition.' Finally the patient acknowledged that her feeling of aversion toward her husband was due to the fact that he continued to have relations with his divorced wife. The thought of becoming pregnant by him aroused such a feeling of disgust that she vomited. Her vomiting ceased after she had become better adjusted to the circumstances. The pregnancy continued.

"It would be a mistake to conclude from this simple rendition of the above case that the vomiting was deliberately planned by the patient. Feelings of anxiety and disgust preceded the pregnancy and neither of these emotional states is conducive to appetite or digestion. The significance of the common morning sickness is easily distorted and magnified by suggestions from friends and relatives and particularly by the serious medical discussions with and in the presence of the patient. A short residence in some hospitals is all that a neurotic patient needs in order to become acquainted with and to develop all the symptoms of a suspected illness. It is unfortunately true that some physicians become absorbed in the discussion of medical problems to the extent of apparently forgetting that their patients have ears and feelings.

"Conflict between the sexes appears to be fundamental in the causation of all kinds of personality disorder. Pregnancy is only one of several stresses which may determine the onset of obvious maladjustment. The prospective mother often has unpleasant memories of her own mother's behavior during pregnancy, she may have friends who keep her alert to the possible dire consequences and she has her own apprehension regarding her ability to meet present and future responsibilities.

"If she has an excess of masculine characteristics and is aggressive, especially towards her husband, she may be troubled during pregnancy with sadistic impulses toward him or with suicidal thoughts if she fails to dominate him and develops a sense of guilt in connection with her inadequacy.

"On the other hand if she depends upon her physical attractions and upon the attention which she can command from others she may find herself in more and more difficulty as she fails in her competition with her children. Not uncommonly with such a narcissistic person marriage and pregnancy represent a somewhat desperate attempt to prove womanly attributes and capacities and this having been demonstrated she then regresses to the immature adaptations of the psychoses.

"The narcissistic woman marries only because she is pursued and flattered. If left to her own resources she will satisfy her own desires or at best will seek another woman, a person in her own image, and thus avoid self sacrifice. In marriage she is almost certain to be frigid and pregnancy may be a step in the direction of mental illness.[2]

"If women could be easily divided into the narcissistic, the homoerotic and the mature heterosexually adjusted, a solution of many problems might be visualized. As a matter of fact all possible combinations of tendencies characteristic of these groups are found in addition to the manifold influences of the environment which too often emphasize deficiencies. Society arbitrarily divides people into male and female by external form when actually their sexual functions and their ability to adjust to adult relationships are determined more by their physiological equipment and most by their psychological background.

"Each physician undoubtedly has his own viewpoint and understanding of such problems and his clinical experience has taught him ways in which he may deal with them. However this may be he must recognize that no amount of skill in dealing with physical illness is adequate when the mental hygiene of the prospective mother has to be considered. The physician must then get thoroughly acquainted with his patient as a person in a difficult life situation. He must have his patient's confidence. He must be an interested and noncommittal listener when the patient is in the mood to talk to him. In most cases he may take the attitude of a confidential friend. This can be done without any violation of the orthodox professional relationship. In some cases he may have to play the role of a father or a wise counsellor.

"Without being at all inquisitive he should spend a little time in the initial interview getting acquainted with his patient. At an appropriate time in his interview, before or after routine examinations, he should learn whether a child is wanted, who wants it and why. A deliberately planned conception may be just as unhygienic as one that is accidental or unwanted. Clues as to possible complications may be obtained from inquiry regarding the pregnancies of the patient's mother, of her sisters, or of her immediate friends. What is the patient's attitude toward pregnancy? What complications or consequences of pregnancy have been suggested to her? What is the actual situation in the home, the economic, social, emotional and psychosexual aspects? Is the patient apprehensive regarding herself or her child? To whom does she appeal when in trouble?

"By thus keeping in touch with the patient's emotional state and with her personal problems the physician will be in a position to take appropriate action before obvious disorder is manifest. It is desirable that the physician give as much reassurance to the patient and to her family as the situation warrants and it is necessary that he conceal his own uncertainty until he has decided upon a course of action. If it should be necessary to have a psychiatric consultation the attending physician can prepare the way by referring to the psychiatrist as a medical colleague and by avoiding the frequent emphasis which is placed upon the psychiatrist's special field of interest. Most patients accept the suggestion that in the course of illness or pregnancy 'worry' or 'nervousness' may play an important role. It is one of the responsibilities of the psychiatrist to advise when and how more specific language may be employed.

"In case a psychiatrist is not available there are a few simple clues which the attending physician may follow in arriving at his own conclusions.

"Mental illness which accompanies actual disease of the brain is likely to be manifested by loss of memory, gross errors in judgment, and in acute conditions there is almost always some disturbance of the patient's ability to keep in touch with her surroundings. Frequently neurological changes may be noted, depending upon the site and nature of the brain disease and the rapidity of its development.

"If the nurse reports that the patient seems 'confused,' especially at night, the physician should be alert to the possibility of a toxic, delirious state. In this condition the patient is likely to be apprehensive, restless, and mixed up as to recent events and perhaps as to her surroundings. Her talk may be incoherent and her behavior 'irrational.' Evidence of such a change is elicited best in a darkened room with external

stimuli reduced to a minimum. Do not question the patient or try to examine her. Instead appear to be studying her chart or otherwise occupied while you listen and make observations. A toxic, delirious state almost always is associated with fever and other indications of acute physical illness. Its presence does not mean that the patient is primarily psychotic. It does mean that whatever the underlying physical condition may be it has become worse. It means that the attending physician should focus his attention upon this underlying physical condition and deal with the delirious state itself only in so far as the patient's tendencies and behavior dictate.

"If the patient becomes unusually animated, talkative, active and aggressive or if, on the contrary, she becomes unduly discouraged, depressed, lacking in energy, troubled with thoughts of the futility of continuing her existence, she needs psychiatric attention because of a manic-depressive psychosis.

"If you have failed to gain the confidence of your patient and she is characteristically reserved and inclined to scrutinize the motives of others or inclined to manifest bizarre, hypochondriacal symptoms she may require psychiatric observation because of a schizophrenic development.

"A large majority of pregnant women are likely to show psychoneurotic manifestations. Phobias, compulsions, anxiety, and neurathenic and hypochondriacal symptoms are probably most common. Excessive vomiting always requires inspection from a psychiatric viewpoint.

"Patients with organic, manic-depressive and schizophrenic psychoses often require treatment in a psychiatric hospital. Ordinarily a toxic, delirious patient is best treated in a general hospital which makes special provision for such cases. The psychoneurotic patient may be treated at home, by her own physician or by a specialist in these disorders or at a psychiatric outpatient clinic.

"Morbid anxiety may be associated with almost any serious illness, including mental illness. A state of mental depression with irritability and a bitter, hopeless outlook on life may determine the choice of suicide.

"Hostile feelings towards others, particularly the husband, and resentment over being pregnant may lead to acts of violence against the husband and the child. Such a patient may disguise these underlying feelings by too much pretense of affection or too great anxiety over the welfare of her child and her family. Do not be misled by the patient's words and be sure to study her emotional reactions as she talks. The truth is likely to be disclosed inadvertently.

"I'm afraid I have allowed myself to dwell too much upon the obvious but I may have given some hints as to the direction in which we may proceed to gain a better understanding of the mental hygiene of the prospective mother. The responsibility for this understanding belongs largely with the medical profession. It is just one of the many in connection with the practice of medicine. The nearest approach to a satisfactory handling of these problems was made by the old general practitioner who knew his patient as well as his diseases. With increasing specialization it will be necessary for all physicians to have thorough psychiatric training and to maintain an interest in psychiatric problems just as all psychiatrists must continue in touch with general medicine if they are to remain well balanced physicians."

1. Zilboorg, G.: Malignant psychoses related to childbirth. Amer. Journ. Obs. & Gyn., 15: 145, 1928. The dynamics of schizophrenic reactions related to pregnancy and childbirth. Amer. Jour. Psychiat. 8: 733, 1928.

2. Henry, G. W.: Psychogenic and constitutional factors in homosexuality: their relation to personality disorders. Psychiat. Quart. 8: 243, 1934.

COMMUNICABLE DISEASES REPORTED

Urban and Rural - June, 1938.

Occurring in the Municipalities of:

Chickenpox: Total 549—Winnipeg 465, Kildonan East 29, Tuxedo 8, Kildonan North 7, St. Boniface 6, Kildonan West 5, Edward 3, Flin Flon 3, Rosser 3, St. Francois Xavier 3, Lac du Bonnet 2, St. James 2, St. Paul East 2, Woodlands 2, Brooklands 1, Fort Garry 1, Gilbert Plains Rural 1, Langford 1, McCreary 1, Portage City 1, Unorganized 1 (Late Reported: May, Fort Garry 1, St. James 1).

Mumps: Total 157—Winnipeg 72, Brandon 32, St. James 17, Ethelbert 7, Portage Rural 6, Kildonan East 4, Unorganized 3, Portage City 1, Tache 1, Transcona 1 (Late Reported: May, Brandon 10, Unorganized 2, Strathclair 1).

Whooping Cough: Total 105—Winnipeg 47, Kildonan East 22, Shell River 8, Unorganized 7, Brandon 6, Transcona 3, St. James 2, Flin Flon 1, St. Clements 1 (Late Reported: May, Brandon 3, Kildonan East 3, Flin Flon 1, Transcona 1).

Scarlet Fever: Total 80—Winnipeg 24, Portage City 8, Lac du Bonnet 7, Unorganized 7, Brenda 4, Harrison 3, Rockwood 3, Brandon 2, Transcona 2, Arthur 1, Assiniboia 1, Charleswood 1, Cypress North 1, Daly 1, Glenwood 1, Melita 1, Pipestone 1, Portage Rural 1, Strathclair 1, St. James 1, Victoria Beach 1, Whitewater 1 (Late Reported: May, Brandon 3, Harrison 1, Portage City 1, Rockwood 1, St. James 1).

Tuberculosis: Total 46—Winnipeg 13, Unorganized 6, Dauphin Town 2, Woodworth 2, Lawrence 2, St. Laurent 2, Virden 2, Assiniboia 1, Bifrost 1, Brandon 1, Brokenhead 1, Gilbert Plains Village 1, Hillsburg 1, Kildonan East 1, Kildonan West 1, Lac du Bonnet 1, Pipestone 1, Portage Rural 1, Siglunes 1, Strathclair 1, Swan River Town 1, St. Clements 1, Ste. Rose 1, Westbourne 1.

Smallpox: Total 20—Unorganized 10, Minto 1 (Late Reported: March, Minto 2; April, Minto 5; May, Minto 2).

Measles: Total 19—Portage Rural 8, Winnipeg 3, Louise 2, Kildonan East 1, Portage City 1, St. James 1, Whitewater 1 (Late Reported: May, Roblin Rural 2).

Influenza: Total 12—St. James 1 (Late Reported: February, Cypress North 1, Montcalm 1; March, Louise 1, Mossey River 1, Rockwood 1, Stonewall 1; April. Brokenhead 1, Dauphin Rural 1, Ethelbert 1, Portage Rural 1, Kreuzberg, Unorganized, 1).

Diphtheria: Total 8 — Winnipeg 6, Stanley 1, Unorganized 1.

Typhoid Fever: Total 7—Unorganized 4, Lansdowne 1, Stanley 1, St. James 1.

Erysipelas: Total 5 — Unorganized 2, Lawrence 1, Richot 1, Winnipeg 1.

Septic Sore Throat: Total 1—Transcona 1.

Venereal Disease: Total 125—Gonorrhoea 70, Syphilis 55.

DEATHS FROM ALL CAUSES IN MANITOBA

For the Month of May, 1938.

URBAN—Cancer 45, Pneumonia 7, Tuberculosis 5, Influenza 1, Erysipelas 1, Septic Sore Throat 1, all others under 1 year 24, all other causes 132, Stillbirths 16. Total 232.

RURAL—Pneumonia 23, Cancer 23, Tuberculosis 18, Influenza 9, Whooping Cough 2, Typhoid Fever 1, all others under 1 year 38, all other causes 176, Stillbirths 11. Total 301.

INDIAN—Tubercuolsis 9, Influenza 3, Pneumonia 1, Scarlet Fever 1, all others under 1 year 5, all other causes 3. Total 22.

Supplementary Data on Report Printed in January "Review"

In the January number of the Manitoba Medical Association *Review* under the report of the Manitoba member on the Executive Committee of the Canadian Medical Association, the following item appeared:

New Appointment for Dr. Routley:

"Dr. Routley, the General Secretary, who has been appointed Managing Director of the Department of Cancer Control, will receive a salary of $300.00 per month for this service."

In a letter dated May 2nd, 1938, the Chairman of the Executive Committee of the Canadian Medical Association, requested that the following supplementary data be added:

"Dr. Routley, while nominally Secretary of the Ontario Medical Association until his resignation is officially accepted at the annual meeting this week, has not been a salaried officer of that organization since December 31st, 1937. His salary from the Canadian Medical Association has been increased as of January 1st, 1938. The increase makes his salary somewhat less than the amount formerly received by him as Secretary of the two organizations."

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Others as required.

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